

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0124893; AI 165383; PER20090002** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Christopher P. Vidrine
 Vidrine's Construction #2
 3105 S. I-49 Service Road
 Opelousas, LA 70570

- II. **PREPARED BY:** Eura DeHart

- DATE PREPARED:** December 22, 2009

- III. **PERMIT ACTION:** Issue LPDES permit LA0124893, AI 165383; PER20090002

- LPDES application received: August 11, 2009

- EPA has not retained enforcement authority.

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated wastewater from the processing of sewage sludge by Christopher P. Vidrine at the Vidrine's Construction #2 facility. The facility will receive sewage sludge (including but not limited to domestic septage and port-o-let wastes) via pump trucks into a sludge holding tank. The sewage sludge will be dewatered and disposed at a permitted landfill. The wastewater will be treated by a 3,000 gpd mechanical treatment plant followed by additional treatment in a 3-cell oxidation pond.

- B. The facility is located at 383 Duck Road in Sunset, St. Landry Parish.

- C. The discharge shall be monitored at Outfall 001 at the point of discharge from the oxidation pond.

- D. **Outfall 001**
 - Discharge Location: Latitude 30° 21' 23" North
 Longitude 92° 07' 37" West

 - Description: treated wastewater generated by the processing of sewage sludge

 - Estimated Flow: 0.003 MGD

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V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into Coulee Crouche, thence into Bayou Carencro, thence into Vermilion Bayou in segment 060801 of the Vermilion-Teche Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060801 of the Vermilion-Teche Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
Not Supported	Not Supported	Not Supported	N/A	N/A	N/A	Full

^{1/}The designated uses and degree of support for Segment 060801 of the Vermilion-Teche Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge will be from a new facility. LDEQ has consulted with the State Historic Preservation Officer (SHPO) in a letter dated August 12, 2009 to determine whether construction-related activities could potentially affect sites or properties on or eligible for listing on the National Register of Historic Places. SHPO's response, dated September 4, 2009 stated that the facility as proposed will have no potential effects.

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VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mr. Eura DeHart
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Subsegment 060801, Vermilion River-Headwaters at Bayou Fusilier-Bourbeaux junction to New Flanders Bridge, Hwy. 3073, is not listed on LDEQ's Final 2006 303(d) list as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/siltation, and carbofuran, for which the below TMDL's have been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 060801:

1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen

This TMDL was revised in December 1999, and approved by EPA on April 5, 2001. This TMDL re-established that NPDES permits for individual point sources in the Vermilion Watershed should continue to be issued on the basis of flow rates as follows:

<u>FLOW RATE</u>	<u>PERMIT LIMITS</u>
greater than 25,000 gpd	May – Dec.: 10 mg/l CBOD ₅ /5 mg/l NH ₃ -N/5 mg/l DO Jan.- April: 20 mg/l CBOD ₅ /10 mg/l NH ₃ -N/5 mg/l DO
25,000 gpd or less	secondary limits year round

Therefore, this discharge will be permitted accordingly.

TMDL for Dissolved Oxygen and Nutrients in the Vermilion River

The TMDL for Dissolved Oxygen and Nutrients in the Vermilion River was final on April 5, 2001. No allocation was given to point source discharges in the Vermilion-Teche River Basin. LDEQ's position regarding water quality criteria for nutrients, is that when oxygen-demanding substances are controlled

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and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. See *In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits*. Docket No. AHD-DR-96001. LDEQ April 29, 1996.

Vermilion River TMDL for Fecal Coliform

The Vermilion River TMDL for Fecal Coliform was finalized on April 5, 2001, addressing the presence of pathogen indicators in the watershed. As per this TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to the current state policy.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin

As per the TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin, point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required. Therefore, TSS limits will be required in this general permit according to the current state policy.

TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion-Teche River Basins

The TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion-Teche River Basins was finalized on March 21, 2002, and states no point sources are known to discharge Carbofuran; therefore, no allocation was given to point source discharges in the Vermilion-Teche River Basin.

Final Effluent Limits:**OUTFALL 001**

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
BOD ₅	30 mg/l	45 mg/l	Limits are set through BPJ and are consistent with the Statewide Sanitary Effluent Limitations Policy (SSELP) for sewage treatment facilities of this size.
TSS	90 mg/l	135 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.

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*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the waterbody standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.).

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Metals Threshold Values

This Office has established the following list of metals with threshold limits intended as action levels. Should a substance exceed the established threshold limit, the permittee shall notify the Office of Environmental Compliance of the exceedence, in writing, within five (5) days. At this time, the facility shall institute a study to determine the source of the substance. Within sixty (60) days of written notification the permittee shall submit a written account of the nature of the study and the measures being taken to secure abatement. Failure to comply with any provision of this paragraph shall constitute a violation of this permit. The Department reserves the right to establish effluent limitations for any of the parameters listed below based upon the results of submitted analyses.

a. 40 CFR Part 136 Analytical Requirements

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 (in its entirety as per LAC 33:IX.2531, Subchapter N, Adoption by Reference) in effect on the effective date of this permit. Appendices A, B, and C to Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated after the effective date of this permit shall supersede these requirement as applicable.

The permittee may use other EPA approved test methods that provide more sensitive test results than those referenced in the permit.

b. If any individual analytical test result is less than the minimum quantification level (MQL) listed below, a value of zero (0) may be used as the test result for those parameters.

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c. Metals List

Parameters	Threshold Limit (ug/l)	ML Required (ug/l)
Total Arsenic	100	10
Total Cadmium	100	1
Total Copper	500	10
Total Lead	150	5
Total Mercury	10	0.2
Total Molybdenum	50	10
Total Nickel (freshwater)	500	40
Total Selenium	100	2
Total Zinc	500	20

X. **PREVIOUS PERMITS:**

No previous permits have been issued for the facility.

XI. **ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) **Inspections**

A review of the files indicates no inspections have been conducted at the facility.

B) **Compliance and/or Administrative Orders**

A review of the files indicates no enforcement actions have been administered against this facility.

C) **DMR Review**

A review of the files revealed no DMRs for this new facility.

XII. **ADDITIONAL INFORMATION:**

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or

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- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving waterbody.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for this type of facility.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	1/week	Measure
BOD ₅	1/quarter	Grab
Total Suspended Solids	1/quarter	Grab
Fecal Coliform Bacteria	1/quarter	Grab
pH	1/quarter	Grab
Priority Pollutants	1/6 months	Grab

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a new permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Christopher P. Vidrine, Vidrine's Construction #2, August 11, 2009.

Supplemental Application Information, Christopher P. Vidrine, Vidrine's Construction #2, November 3, 2009.

Supplemental Application Information, Christopher P. Vidrine, Vidrine's Construction #2, December 17, 2009.